

Department of Planning, Building and Code Enforcement

BUILDING DIVISION

POLICY ON TANKLESS WATER HEATERS

Policy No.: CPC 501-1-01 Effective Date: June 1, 2004

This policy is intended to clarify the issue of using tankless water heaters (TWH) as the source of domestic hot water for dwellings, both as replacements for storage tank water heaters in existing dwellings or for new construction.

Due to the limited flow rate in gallons per minute (gpm) of tankless water heaters, primary consideration must be given to the hot water usage which can be anticipated for each dwelling, based upon the number of plumbing fixtures utilizing hot water. Depending on the inlet water temperature and the heating capacity of the TWH, there may be an insufficient quantity of hot water to provide for the needs of the occupants unless a large enough TWH, or multiple TWHs are installed.

Tankless Water Heater Selection:

? The delivery capacity of each TWH shall be determined by the manufacturer's recommendations. The inlet water temperature shall be assumed to be 50°F, and desired delivery temperature will be 110°F (60°F temperature rise). Each TWH (or multiple TWHs) shall meet or exceed the requirements of the Uniform Plumbing Code, Sections 301, 501, and Table 5-1

Tankless Water Heater Venting:

- ? The venting systems for TWHs are typically larger than those of tank type heaters. The existing vent on change-outs may not be large enough. All TWH vents shall be sized for the new heater, plus any other gas fired appliances which share the same system.
- ? Several manufacturer's TWHs use positive pressure (forced) vents. Such vents shall comply with the UMC venting requirements for Category III appliances. Type B venting material is <u>not</u> acceptable for positive pressure venting.

Tankless Water Heater Electrical:

? TWH units may require a 110V receptacle for operation. When installed in a garage, the power for these units may not be from the GFCI protected garage circuit, but shall be provided by a dedicated single receptacle from a general lighting circuit.

Gas Piping:

? TWHs generally require a significantly greater quantity of gas than a storage tank heater. Care must be taken to verify that existing house gas piping is adequately sized for the increased load.

Combustion Air:

Post new and replacement TWH installations shall comply with current UPC (Section 507, Table 5.2) requirements.

| Initiated by: | Approved by: |
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